## Abstract

A system detects an incoming telephone call and routes the ring signal to a
loudspeaker so that it can be heard at a distance from the telephony device. Once
the incoming call has been acknowledged the incoming signal is routed to the
headset. New incoming calls are identified by verifying the presence of unique
characteristics that are found only in incoming calls. In a conventional telephone
the unique characteristic can be a combination of frequencies which are part of the
ring signal. The frequencies can be verified by using a bandpass filter which allows
only frequencies centered around the ring frequency to pass. Therefore, if a signal
of correct frequency is present it will pass through the bandpass filter and activate
a switch that routes the signal to the loudspeaker.